

Amendments To the Claims:

Please amend the claims as shown.

1. (currently amended) A ~~P~~premix burner (~~1~~) comprising:
an annular air channel (~~3~~) for guidance of combustion air (~~4~~) along a flow direction; and
a fuel inlet (~~11~~) for feeding fuel (~~5~~) into said combustion air (~~4~~),
wherein a profiling means (~~2~~) is located in said air channel (~~3~~) upstream of said fuel inlet (~~11~~) for
profiling the mass stream of said combustion air (~~4~~) in a direction perpendicular to said flow
direction, wherein according to said profiling, a fuel density downstream said fuel inlet (~~11~~)
varies along every radial direction (~~R~~) through said annular air channel (~~3~~).
2. (currently amended) A ~~B~~burner (~~1~~) according to claim 1, wherein the profiling means (~~2~~) is a
perforated, annular shaped metal plate, wherein every hole (~~13~~) of said plate (~~2~~) has a respective
hole area, thereby forming a hole area density of said metal plate and wherein said hole area
density varies in a radial direction (~~R~~).
3. (currently amended) A ~~B~~burner (~~1~~) according to claim 2, wherein the hole area density
increases in an outward radial direction (~~R~~).
4. (currently amended) A ~~B~~burner (~~1~~) according to claim 1, wherein the profiling means (~~2~~) is a
grid.
5. (currently amended) A ~~B~~burner (~~1~~) according to claim 1, wherein the profiling means (~~2~~) is a
sieve.
6. (currently amended) A ~~B~~burner (~~1~~) according to claim 1, wherein the profiling is such that
said mass stream of said combustion air (~~4~~) increases in an outward radial direction (~~R~~).
7. (currently amended) A ~~B~~burner (~~1~~) according to claim 1, wherein the annular air channel (~~3~~)
encircles a central diffusion burner (~~16~~).

8. (currently amended) A gas turbine (110), comprising with a premix burner (1) according to one of the preceding claims, wherein the premix burner comprising:
an annular air channel for guidance of combustion air along a flow direction; and
a fuel inlet for feeding fuel into said combustion air,
wherein a profiling means is located in said air channel upstream of said fuel inlet for profiling the mass stream of said combustion air in a direction perpendicular to said flow direction,
wherein according to said profiling, a fuel density downstream said fuel inlet varies along every radial direction through said annular air channel.

9. (currently amended) A process for burning fuel (5) in air (4), comprising: the steps of
guiding air through an annular channel (3) of a premix burner (1);
profiling the mass stream of said air (4) in such a way that the mass stream varies along every radial direction (R) through said annular air channel (3);
feeding fuel (5) into said profiled air stream at a fuel inlet (11), thereby generating a fuel/air mixture with varying fuel density along every radial direction (R) through said annular air channel (3); and
igniting and burning said fuel/air mixture.

10. (new) A gas turbine according to claim 8, wherein the profiling means of the burner is a perforated, annular shaped metal plate, wherein every hole of said plate has a respective hole area, thereby forming a hole area density of said metal plate and wherein said hole area density varies in a radial direction.

11. (new) A gas turbine according to claim 10, wherein the hole area density increases in an outward radial direction.

12. (new) A gas turbine according to claim 8, wherein the profiling means is a grid.

13. (new) A gas turbine according to claim 8, wherein the profiling means is a sieve.

14. (new) A gas turbine according to claim 8, wherein the profiling is such that said mass stream of said combustion air increases in an outward radial direction.

15. (new) A gas turbine according to claim 8, wherein the annular air channel encircles a central diffusion burner.

Amendments To the Abstract:

Please amend the section heading at page 15 line 1, as follows:

~~ABSTRACT OF THE INVENTION~~

Please amend the paragraph at page 15 lines 3 to 14, as follows:

The invention relates to a premix burner (~~1~~) for burning fuel (~~5~~) with air (~~4~~) to combustion gas, in particular within a combustion turbine. Profiling means (~~2~~) are provided for profiling the mass stream of the combustion air (~~4~~) in a direction radial to an annular shaped air channel (~~3~~) in order to generate a radial varying fuel/air mixture that stabilises the combustion. Accordingly, the invention also relates to a gas turbine (~~110~~) and a process for burning fuel in air.

~~Fig. 1~~